BRUHATH BENGALURU MAHANAGARA PALIKE

EXECUTIVE ENGINEER, YELAHANKLA DIIVISION

Name of Work: Drilling of Borewell and Erection of Pumpset, Electrification to Borewell at Chikkabettahalli, Doddabettahalli and Annthapura Village Areas in Attur Ward No.03 of Yelahanka Satellite Town Sub Division.

DETAILED ESTIMATE

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	NEW BOREWELL								
1	Geophysical investigation at site for sinking borewells for Providing drinking water to the habitation either through the Hand Pump MWS or P.W.S.S, by vertical electrical sounding by adopting Venner or Schlumbergers's method, including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity, its quality, quantity and acceptability of the users, indicating the location of the site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instruments and accessories to work site, engaging technical personal and labour required etc. NOTE: 1) Additional rate on item 1&2 is allowed for drilling in over burden and fixing Casing pipes beyond 20 M (for fixing Casing pipes only) a) Above 20 M and upto 30 M - 15%, b) Above 30 M - 30% (Measurement of overburden is restricted to the depth of casing pipe fixed excluding initial depth of 20M and projection above ground level). 2) A sum of Rs. 100/- is to be deducted for Dry Borewell towards yield test. etc. complete (Page No.140, Sl No.12.4, BWSSB SR 2023-24)								
		Each							
	Sinking borewells		4				4.00		
							4.00	**5816.80**	**23267.20**
	Rate Analysis								
	Basic Rate Rs.	5288.00							
	Area weightage 10%	528.80							
	Total Amount Rs.	5816.80							
	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern upto 20 m. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes, collars, cap etc., complete) (Above 450m of drilling add 10% for every 50m depth) (Page No.139 Sl No.12.1, BWSSB SR 2023-24)								
		rmt							
2	a) 0.00 to 50.00 mtrs		4			50.00	200.00	407.00	81400.00
	Rate Analysis								
	Basic Rate Rs.	370.00							
	Area weightage 10%	37.00							
	Total Amount Rs.	407.00							
3	b) 50.00 to 100.00 mtrs		4			50.00	200.00	510.40	102080.00
	Rate Analysis								
	Basic Rate Rs.	464.00							
	Area weightage 10%	46.40							
	Total Amount Rs.	510.40							
4	c) 100.00 to 150.00 mtrs		4			50.00	200.00	542.30	108460.00
	Rate Analysis								
	Basic Rate Rs.	493.00							
	Area weightage 10%	49.30							
	Total Amount Rs.	542.30							
5	d) 150.00 to 200.00 mtrs		4			50.00	200.00	629.20	125840.00
	Rate Analysis								
	Basic Rate Rs.	572.00							
	Area weightage 10%	57.20							
	Total Amount Rs.	629.20							
6	e) 200.00 to 250.00 mtrs		4			50.00	200.00	738.10	147620.00
	Rate Analysis								
	Basic Rate Rs.	671.00							
	Area weightage 10%	67.10							
	Total Amount Rs.	738.10							
7	f) 250.00 to 300.00 mtrs		4			50.00	200.00	814.00	162800.00

		Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount
	Basic Rate Rs.	740.00							
	Area weightage 10%	74.00							
8	Total Amount Rs.	814.00							
	g)300.00 to 350.00 mtrs								
	Rate Analysis		4						
						15.00	60.00	954.80	57288
	Basic Rate Rs.	868.00							
	Area weightage 10%	86.80							
	Total Amount Rs.	954.80							
9	Supply of ISI mark 175mm nominal bore,plain and steel casing pipe grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest ammendments, electrical resistance welded steel tubes, material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5-7m both ends.threaded conforming to IS 554-1985 one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes all shall be responsibaly free from defects. The tubes shall be responsible straight end should be with ISI marking weighing 25.10kg/m.prices include Collar-Medium duty. (Page No.143, It no.12.32, BWSSB Sr-2023-24)								
	a) Casing Pipe	rmt							
	Gor new borewells		4						
						75.00	300.00		
						Total Qty	300.00	2126.30	637890.00
	Rate Analysis								
	Basic Rate Rs.	1933.00							
	Area weightage 10%	193.30							
	Total Amount Rs.	2126.30							
10	Providing Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per specifications, to work site as per necessary ammendments and instructions of engineer incharge of work. For 12.50 HP - 90 LPM @ 264 m = 24 STG Outlet Dia - 2.00" (BWSSB 2023-24, P-153, I-13.17.7)								
		Nos							
			4				4.00	70540.80	282163.20
	Rate Analysis								
	Basic Rate Rs.	64128.00							
	Area weightage 10%	6412.80							
	Total Amount Rs.	70540.80							
11	Supplying and Drawing 3 Core Flat PVC Shelted Submerisible Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 6.0Sqm (Page No:7 Iten No:2.6.3 ELE SR SR 2023-24)								
		mtr	4	2	300		2400.00	245.00	588000.00
	for new borewells								
12	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50mm dia (BWSSB SR 2023-24, P.154, I-13.25.1)								
		Each							
			4				4.00	1375.00	5500.00
	Rate Analysis								
	Basic Rate Rs.	1250.00							
	Area weightage 10%	125.00							
	Total Amount Rs.	1375.00							
13	Supply and delivery at site of brand new best make gate valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50 mm (Page No.154 Item No.13.24.1, BWSSB SR- 2023-24)								
		Nos							
			4				4.00	1375.00	5500.00
	Rate Analysis								
	Basic Rate Rs.	1250.00							
	Area weightage 10%	125.00							
	Total Amount Rs.	1375.00							

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
14	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
		Nos							
			4	1.00			4.00	293.70	1174.80
	Rate Analysis								
	Basic Rate Rs.	267.00							
	Area weightage 10%	26.70							
	Total Amount Rs.	293.70							
15	Providing, Laying and Fixing of GI pipes conforming to IS 1239:1990 with latest amendments complete with GI fittings (excluding the cost of fittings) with cuts and threads wherever necessary, including testing for water tightness, with all lead and commissioning. (contractor will make his own arrangements for procuring water for testing) For:Heavy Duty GI Pipe etc. complete. Light Duty GI pipe of 50mm dia (BWSSB SR 2023-24 P-127, I-11.1.6)								
		mtr							
			4	260.00			1040.00	486.20	505648.00
	Rate Analysis								
	Basic Rate Rs.	442.00							
	Area weightage 10%	44.20							
	Total Amount Rs.	486.20							
16	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
		Each							
			4				4.00	293.70	1174.80
	Rate Analysis								
	Basic Rate Rs.	267.00							
	Area weightage 10%	26.70							
	Total Amount Rs.	293.70							
17	Supply, installing,testing and commissioning COMMON control panel consisting of the following INCOMING:1 No set of Phase indicating lamps with SFU of suitable rating 1 No, Analog Ammeter, 1 No Analog Voltmeter 1ni with Phase selector switch, Isolating switch OUTGOING for Main Electrical Pump: 1 No. MCB 1 No. DOL of S/D Starter suitable for respective HP 1 No. Electrcal Protection Like single Phase preventor, under voltage over Volage, under current over current & dry run protection suitable for the pump described above 1 no Indoor type NOTE: 1) DOL-Direct Online Starter 2) S-D- Star Delta Starter etc. complete.6 to 15 HP pumps (BWSSB, SR 2023-24, P-155, Item No.13.23.3)								
		Each							
			4				4.00	17490.00	69960.00
	Rate Analysis								
	Basic Rate Rs.	15900.00							
	Area weightage 10%	1590.00							
	Total Amount Rs.	17490.00							
18	Labour charges for Erection, Electrification and commissioning of Pump sets, including aligning and balancing of all items including supply and erection of two pair of supporting clamps, bore well caps, cable clips and water tight gland cable protectors, bolts, nuts, valve and gauges,tools and equipments etc., involved in the job as per specifications, with necessary tests as per specifications, with testing of as per instructions of engineer incharge of work. (Page No.156 / Item No. 13.32, BWSSB SR-2023-24)								
		Job							
			4				4.00	7150.00	28600.00
	Rate Analysis								
	Basic Rate Rs.	6500.00							
	Area weightage 10%	650.00							
	Total Amount Rs.	7150.00							

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in
19	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. F) 20" x 20" x 2.5" (PWD Electrical SR 2023-24 P-14, I-5.6.6)								
		Each							
			4				4.00	326.13	1304.52
20	Labour charges for erection of outdoor type panel board and meter board units with all necessary materials and labour, tools and equipments including providing cement concrete foundation bed etc., complete as per specification, with testing of as per instructions of engineer incharge of work. (Page No.156 / Item No. 13.34, BWSSB SR-2023-24)								
		Job							
			4				4.00	1595.00	6380.00
	Rate Analysis								
	Basic Rate Rs.	1450.00							
	Area weightage 10%	145.00							
	Total Amount Rs.	1595.00							
21	Earthing: Suppluing and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts,nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (PWD Electrical SR 2022-23, P-54, Item No.12.56)								
		Job							
			4				4.00	3510.00	14040.00
22	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (PWD Electrical SR 2023-24 P-18, I- 5.18.9)								
		Each							
			4				4.00	3088.00	12352.00
23	Supply and delivery at site brand new best make starter/ control panel suitable for following HP centrifugal pump confirming with ISI mark and its latest amendments. 10 to 12 HP centrifugal pump (Page No. 158 / Item No. 13.43.3, BWSSB SR 2023-24)								
		Each							
			4				4.00	39215.00	156860
	Rate Analysis								
	Basic Rate Rs.	35650.00							
	Area weightage 10%	3565.00							
	Total Amount Rs.	39215.00							
24	Yield testing of borewells at final depth with a minimum of 10 hours continuously with the help of pump testing unit including the cost of transportation charges, crew charges and cost of consumables. (Sl No.12.9, Page No.140, BWSSB SR 2023-24)								
		Each							
			4				4.00	17936.60	71
	Rate Analysis								
	Basic Rate Rs.	16306.00							
	Area weightage 10%	1630.60							
	Total Amount Rs.	17936.60							
25	Supplying of TPST with rewirable porcelain channels in SM enclosure. Made out of 14 SWG powder coated paint of approved colour. 32A (Page No-14 , Item No-5.5.1, ELE SR 2023-24)								
		Nos							
			4				4.00	1701.00	
	Supplying and fixing LED Type panel board indicating lamp with required colour for 220 V AC 50Hz 12/24 V DC Group 'A' (Page No-19 , Item No-5.38, ELE								
		Nos							
						3.00	12.00	515.00	

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
		Each							
			4	6.00			24.00	401.00	9624.00
28	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x 6 mm (PWD Electrical SR 2023-24 , Page NO:20, Item No:5.41.1).(Per leg 2. 5MtrX2 Nos legs)-5.00 Mtr Per Box								
		rmt							
			4	5.00			20.00	305.00	6100.00
29	Supplying Fully Automatic Star- Delta Starter Unit Push Button Type With Suitable Wires 3 Contractors, One Adjustable Thermal Timer Mounted on a Common Base Plate held in Steel Enclosure For Use on 400/440 Volts 3 Phase and Wired after Fixing to the Exisiting Wooden Board For Motor, Above 12.5 HP upto 25 HP (Page No-14 , Item No-5.2.2, ELE SR 2023-24)								
		Nos							
	1) Group "A" upto 15 HP		4				4.00	8764.00	35056.00
30	Providing, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-2016 with latest ammendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials with electrofusion welding, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bedns, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. complete. NOTE: Upto 110mm dia Coil shall be used. For :HDPE PE 80 PN 6.0 HDPE Grade PE80-PN6.0, 63mm dia (Vol 5 P No- 95 Item No-9.1.1 BWSSB SR 2023-24)								
		M	300				300.00	207.90	62370.00
	Rate Analysis								
	Basic Rate Rs.	189.00							
	Area weightage 10%	18.90							
	Total Amount Rs.	207.90							
31	Providing Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per specifications, to work site as per necessary ammendments and instructions of engineer incharge of work.								
	For 7.50 HP - 90 LPM @ 165 m = 16 STG Outlet Dia - 2.00"	No	1				1.00	44891.00	44891.00
	Rate Analysis								
	Basic Rate Rs.	40810.00							
	Area weightage 10%	4081.00							
	Total Amount Rs.	44891.00							
32	For 15.00 HP - 120 LPM @ 266 m =23 STG outlet dia-2mm	no	1				1.00	76278.40	76278.40
	Basic Rate Rs.	69344.00							
	Area weightage 10%	6934.40							
	Total Amount Rs.	76278.40							
	MOTOR REWINDING								
	Rewinding of submersible pumpset with copper winding wires of appropriate guage, as per specifications and / or directions of the departmental officials, including all materials, labour, equipment and testing. for all types of submersible pumpsets etc.(with guarantee period not less than 6 months) for For all types of submersible pumpsets above 7.0 HP and upto 7.5H.P (BWSSB 'SR 2023-24 P- 147)								
33	For all types of submersible pumpsets above 7.0 HP and upto 7.5H.P	No					5.00	4222.90	21114.50
	Rate Analysis								
	Basic Rate Rs.	3839.00							
	Area weightage 10%	383.90							
	Total Amount Rs.	4222.90							

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
34	For all types of submersible pumpsets above 10 HP and upto 11 H.P	No					5.00	5782.70	28913.50
	Rate Analysis								
	Basic Rate Rs.	5257.00							
	Area weightage 10%	525.70							
	Total Amount Rs.	5782.70							
35	For all types of submersible pumpsets above 12 HP and upto 13 H.P	No					5.00	6581.30	32906.50
	Rate Analysis								
	Basic Rate Rs.	5983.00							
	Area weightage 10%	598.30							
	Total Amount Rs.	6581.30							
	B) Repair of Pump parts								
	Replace the components of submersible pump sets, requiring replacements decided by the departmental officials, with respective make of damaged ones, including all materials, labour, equipments and testing etc.(with gurantee of period not less than 1 year) for: (BWSSB SR 2023-24 P- 145 I- 13.2.1 to 13.2.17)								
36	The bowls of same type and make	Each					15.00	1650.00	24750.00
	Rate Analysis								
	Basic Rate Rs.	1500.00							
	Area weightage 10%	150.00							
	Total Amount Rs.	1650.00							
37	The Intermediate piece (IP) with IP leaded bronze brush.	Each					15.00	1155.00	17325.00
	Rate Analysis								
	Basic Rate Rs.	1050.00							
	Area weightage 10%	105.00							
	Total Amount Rs.	1155.00							
38	The Oil Seal.	Each					15.00	385.00	5775.00
	Rate Analysis								
	Basic Rate Rs.	350.00							
	Area weightage 10%	35.00							
	Total Amount Rs.	385.00							
39	The Oil Seal.and steel bush	Each					15.00	275.00	4125.00
	Rate Analysis								
	Basic Rate Rs.	250.00							
	Area weightage 10%	25.00							
	Total Amount Rs.	275.00							
40	The Guide Vane	Each					15.00	770.00	11550.00
	Rate Analysis								
	Basic Rate Rs.	700.00							
	Area weightage 10%	70.00							
	Total Amount Rs.	770.00							
41	The Impeller (Shell moulded with aluminium and bronze.)	Each					15.00	1650.00	24750.00
	Rate Analysis								
	Basic Rate Rs.	1500.00							
	Area weightage 10%	150.00							
	Total Amount Rs.	1650.00							
42	The discharge outlet (DO) bearing DO steel brush DO bearing	Each					15.00	2255.00	33825.00
	Rate Analysis								
	Basic Rate Rs.	2050.00							
	Area weightage 10%	205.00							
	Total Amount Rs.	2255.00							
	The steel bearing bush (DO steel	Each					15.00	440.00	6600.00

SL	
45	The p… stainl… with … for Ea…
	Rate …
46	Pum…
	Rate…
47	Pum…
	Rate…
48	No… con…
	Ra…
49	C…
	R…
50	
51	

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Area weightage 10%	120.00							
	Total Amount Rs.	1320.00							
45	The pump shaft made out of stainless steel counterless ground with key way (upto 8 stages). Extra for Each stage @ Rs.40/-.	Each					15.00	1650.00	24750.00
	Rate Analysis								
	Basic Rate Rs.	1500.00							
	Area weightage 10%	150.00							
	Total Amount Rs.	1650.00							
46	Pump key (stainless steel)	Each					15.00	715.00	10725.00
	Rate Analysis								
	Basic Rate Rs.	650.00							
	Area weightage 10%	65.00							
	Total Amount Rs.	715.00							
47	Pump coupling (stainless steel)	Each					15.00	1650.00	24750.00
	Rate Analysis								
	Basic Rate Rs.	1500.00							
	Area weightage 10%	150.00							
	Total Amount Rs.	1650.00							
48	Non-return valve (NRV) assembly complete with rubber 'O' ring	Each					15.00	715.00	10725.00
	Rate Analysis								
	Basic Rate Rs.	650.00							
	Area weightage 10%	65.00							
	Total Amount Rs.	715.00							
49	Cable Guad	Each					15.00	385.00	5775.00
	Rate Analysis								
	Basic Rate Rs.	350.00							
	Area weightage 10%	35.00							
	Total Amount Rs.	385.00							
50	Strainer	Each					15.00	495.00	7425.00
	Rate Analysis								
	Basic Rate Rs.	450.00							
	Area weightage 10%	45.00							
	Total Amount Rs.	495.00							
51	Brass filter	Each					15.00	1155.00	17325.00
	Rate Analysis								
	Basic Rate Rs.	1050.00							
	Area weightage 10%	105.00							
	Total Amount Rs.	1155.00							
52	The Labour Charges for overhauling of the pump set.	Each					15.00	990.00	14850.00
	Rate Analysis								
	Basic Rate Rs.	900.00							
	Area weightage 10%	90.00							
	Total Amount Rs.	990.00							
	C.Replacement of Motor parts Replace the components of motor parts of submersible pump sets, items requiring replacements decided by the departmental officials, with respective make of damaged ones, including all materials, labour, equipments and testing etc and wtih guarantee/warranty for one year for: (BWSSB, SR 2023-24, Page No. 148, Item No.13.3.7 to 13.3.21)								
53	Upper Flange	Each					15.00	715.00	10725.00
	Rate Analysis								
	Basic Rate Rs.	650.00							
	Area weightage 10%	65.00							
	Total Amount Rs.	715.00							
54	Lower Flange	Each					15.00	715.00	10725.00
	Rate Analysis								
	Basic Rate Rs.	650.00							
	Area weightage 10%	65.00							
	Total Amount Rs.	715.00							
55	Lower Housing	Each					15.00	1320.00	19800.00
	Rate Analysis								
	Basic Rate Rs.	1200.00							
	Area weightage 10%	120.00							

No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Total Amount Rs.	1320.00							
56	Lock Ring	Each					15.00	385.00	5775.00
	Rate Analysis								
	Basic Rate Rs.	350.00							
	Area weightage 10%	35.00							
	Total Amount Rs.	385.00							
57	Carbon Housing	Each					15.00	2200.00	33000.00
	Rate Analysis								
	Basic Rate Rs.	2000.00							
	Area weightage 10%	200.00							
	Total Amount Rs.	2200.00							
58	The Carbon Housing (Thrust bearing block assembly complete with segment bearing pad.	Each					15.00	2200.00	33000.00
	Rate Analysis								
	Basic Rate Rs.	2200.00							
	Area weightage 10%	220.00							
	Total Amount Rs.	2420.00							
59	The Carbon Housing (Top carbond / ferrodo padding)	Each					15.00	385.00	5775.00
	Rate Analysis								
	Basic Rate Rs.	350.00							
	Area weightage 10%	35.00							
	Total Amount Rs.	385.00							
60	Stud and Nuts	Each					15.00	220.00	3300.00
	Rate Analysis								
	Basic Rate Rs.	200.00							
	Area weightage 10%	20.00							
	Total Amount Rs.	220.00							
61	The Gun Metal bearing, centrifugally cast Aluminium Bronze bearing bush	Each					15.00	935.00	14025.00
	Rate Analysis								
	Basic Rate Rs.	850.00							
	Area weightage 10%	85.00							
	Total Amount Rs.	935.00							
62	Circlips	Each					15.00	220.00	3300.00
	Rate Analysis								
	Basic Rate Rs.	200.00							
	Area weightage 10%	20.00							
	Total Amount Rs.	220.00							
63	Motor base with pin	Each					15.00	550.00	8250.00
	Rate Analysis								
	Basic Rate Rs.	500.00							
	Area weightage 10%	50.00							
	Total Amount Rs.	550.00							
64	Transportotion of pumping machineries	Each					15.00	1650.00	24750.00
	Rate Analysis								
	Basic Rate Rs.	1500.00							
	Area weightage 10%	150.00							
	Total Amount Rs.	1650.00							
65	Labour charges Over hauling only) Motar	Each					15.00	3300.00	49500.00
	Rate Analysis								
	Basic Rate Rs.	3000.00							
	Area weightage 10%	300.00							
	Total Amount Rs.	3300.00							
66	Labour charges for Lifting of non functioning submersible pump set along with cable and GI pipes (Each length = 6m)). for 50 mm (BW SSB SR 2023-24 P- 142 Item No.12.24)								
		Job	15	35.00			525.00		
							525.00	251.90	132247.50
	Rate Analysis								
	Basic Rate Rs.	229.00							

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
67	Labour charges for Erection of new / repaired submersible pump set along with GI pipes (32mm / 50mm), cable (New submersible pump set if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (Each length = 6 m) (BWSSB SR 2023-24 P- 142 Item No.-12.28)						525.00		
		Job	15	35.00			525.00	205.70	107992.50
	Rate Analysis								
	Basic Rate Rs.	187.00							
	Area weightage 10%	18.70							
	Total Amount Rs.	205.70							
68	Supplying and Drawing 3 Core Flat PVC Shelted Submerisible Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 6.0Sqm (Page No:7 Iten No:2.6.3 ELE SR SR 2023-24)						600.00		
		RMT	2	300.00			600.00	245.00	147000.00
69	Water hose (pressure hose) (WRD SR 2023-24 P- 21, Item No-29)						1000.00	250.00	250000.00
		RMT	4	250.00					
	Basic Rate Rs.	228.00							
	Area weightage 10%	22.80							
	Total Amount Rs.	250.00							
70	Fabricating supplying and mounting MS box made out 14SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete., (PWD Electrical SR- 2022-23 , Page No:20, Item No:5.42.1) 1200x850x2=2040000, 850x350x2=595000, (350+450)/2=400, 400x1200=480000, 480000x2=960000, 3595000/100=35950Sqcm								
		Sqcm							
	Sambram Collage Surrounding, Sai Nagara, BHAL Layout, Jyothi Nagara, Anugraha Badavane, maruthi Layout, Subhash chandra Bose Road and Surrounding Areas		12			35950.00		431400.00	
	Chikkbettahalli, Doddbettahalli Layout, Ambabhavani Layout, Adithya Nagara Phase-1 & Phase-2, Rajeevgandhi Nagara and AMS Layout and Surrinding Areas		10			35950.00		359500.00	
	Ananthpura Village, Mahalakshmi Layout, Prakruthi Layout and Surrounding Areas		5			35950.00		179750.00	
						Total Qty	970650.00	0.50	485325.00
71	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x 6 mm (PWD Electrical SR 2023-24 , Page NO:20, Item No:5.41.1.(Per leg 2. 5MtrX2 Nos legs)-5.00 Mtr Per Box								
		Mtrs					140.00	305.00	42700.00
			28	5.00					
72	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. F) 20" x 20" x 2.5" (PWD Electrical SR 2023-24 P-14, I-5.6.6)								
		Each					25.00	326.13	8153.25
			25						
73	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (PWD Electrical SR 2023-24 P-18, I- 5.18.9)								
		Each							

			25							
74	Supplying & fixing of Porcelain fuse channel with cutout on existing wooden/panel using necessary nuts, bolts and washers. (PWD Electrical SR 2023-24 P-14, I-5.7.3)									
		Each						25.00	401.00	
			25							
75	Earthing: Suppluing and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts,nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (PWD Electrical SR 2022-23, P. 54, Item No.12.56)									
		No						25.00	3510.00	
			25							
76	Providing, Laying and Fixing of GI pipes conforming to IS 1239:1990 with latest amendments complete with GI fittings (excluding the cost of fittings) with cuts and threads wherever necessary, including testing for water tightness, with all lead and commissioning. (contractor will make his own arrangements for procuring water for testing) For:Heavy Duty GI Pipe etc. complete. Light Duty GI pipe of 50mm dia (BWSSB SR 2023-24 P-127, I-11.1.6)									
		Mtrs						500.00	486.20	
			500							
	Rate Analysis									
	Basic Rate Rs.	442.00								
	Area weightage 10%	44.20								
	Total Amount Rs.	486.20								
77	Supply, installing,testing and commissioning COMMON control panel consisting of the following INCOMING:1 No set of Phase indicating lamps with SFU of suitable rating 1 No, Analog Ammeter, 1 No Analog Voltmeter 1ni with Phase selector switch, Isolating switch OUTGOING for Main Electrical Pump: 1 No. MCB 1 No. DOL of S/D Starter suitable for respective HP 1 No. Electrcal Protection Like single Phase preventor, under voltage over Volage, under current over current & dry run protection suitable for the pump described above 1 no Indoor type NOTE: 1) DOL-Direct Online Starter 2) S-D- Star Delta Starter etc. complete.6 to 15 HP pumps (BWSSB, SR 2023-24, P-155, Item No.13.23.3)									
		Each						20.00	17490.00	
			20							
	Rate Analysis									
	Basic Rate Rs.	15900.00								
	Area weightage 10%	1590.00								
	Total Amount Rs.	17490.00								
78	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest amendments Size 50mm dia (BWSSB SR 2023-24, P.154, I-13.25.1)									
		Each						20.00	1375.00	
			20							
	Rate Analysis									
	Basic Rate Rs.	1250.00								
	Area weightage 10%	125.00								
	Total Amount Rs.	1375.00								
79	Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)									
		Each						20.00	293.70	
			20							
	Rate Analysis									
	Basic Rate Rs.	267.00								
	Area weightage 10%	26.70								
	Total Amount Rs.	293.70								
80	Supply and delivery at site wrought middle steel (galvanized) GI elbow confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-129, I-11.7.6)									
		Each							293.70	

SL	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Basic Rate Rs.	267.00							
	Area weightage 10%	26.70							
	Total Amount Rs.	293.70							
81	Supply and delivery at site wrought middle steel (galvanized) GI hexagonal nipple confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI hexagonal nipple (BWSSB SR 2023-24 P-132, I-11.14.6)								
		Each							
			20				20.00	234.30	4686.00
	Rate Analysis								
	Basic Rate Rs.	213.00							
	Area weightage 10%	21.30							
	Total Amount Rs.	234.30							
82	Providing wrought mild steel (galvanized) GI collar confirming to IS 1239-II, 1991 with latest amendments if any. For 50 mm dia GI collar (BWSSB SR 2023-24 P-129, I-11.14.6)								
		Nos							
			198				198.00	293.70	58152.60
	Rate Analysis								
	Basic Rate Rs.	267.00							
	Area weightage 10%	26.70							
	Total Amount Rs.	293.70							
83	Re-drilling of filled-up borewell, including yield test at final depth. (BWSSB SR 2023-24 P-140, I-12.6)								
		Mtrs							
			275				275.00	488.40	134310.00
	Rate Analysis								
	Basic Rate Rs.	444.00							
	Area weightage 10%	44.40							
	Total Amount Rs.	488.40							
84	Logging / scanning of borewell at any depth continuously with the help of Logger unit including the cost of transportation charges, crew charges, stationery charges and cost of consumables etc. (BWSSB SR 2023-24 P-140, I-12.7)								
		Each							
			10				10.00	4041.40	40414.00
	Rate Analysis								
	Basic Rate Rs.	3674.00							
	Area weightage 10%	367.40							
	Total Amount Rs.	4041.40							
85	Lifting of struck up Submersible Pump set, upto 300 ft (BWSSB SR 2023-24 P-142, I-12.26)								
		Job							
			15				15.00	7486.60	112299.00
	Rate Analysis								
	Basic Rate Rs.	6806.00							
	Area weightage 10%	680.60							
	Total Amount Rs.	7486.60							
86	Cutting and threading G.I. pipes for pump fitting, public fountains with appurtenances., where the length of pipe laid is less than 6 metres Pipes of dia 32mm to 80mm (BWSSB SR 2023-24 P-15, I-2.2.2)								
		Each							
			247				247.00	354.20	87487.40
	Rate Analysis								
	Basic Rate Rs.	322.00							
	Area weightage 10%	32.20							
	Total Amount Rs.	354.20							
	PVC Pipe Line Maintenance								
87	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or leveling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work. In all kinds of soils. Depth upto 1.50m (KPWD SR 2023-24, V-I, Page No.6, Item No.1.6.1)								
	Rate Analysis	Cum							

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	Basic Rate Rs.	484.00							
	Area weightage 10%	48.40							
	Total Amount Rs.	532.40							
	Ambhabhavani Layout						90.00		
	2nd Cross Road		1	200.00	0.60	0.75	112.50		
	3rd Cross Road		1	250.00	0.60	0.75	153.90		
	Sai Baba Temple Road and other Back side Roads		1	342.00	0.60	0.75			
						Total Qty	356.40	532.40	189747.36
88	Providing PVC ringtite pipes conforming to IS 985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. complete For: PVC pipes 50mm dia., 6 kg/sqcm & class 5 (BWSSB SR 2023-24, Page No.113 Item No.10.1.3)								
		Mtrs							
	Ambhabhavani Layout						200.00		
	2nd Cross Road		1	200.00			250.00		
	3rd Cross Road		1	250.00			342.00		
	Sai Baba Temple Road and other Back side Roads		1	342.00					
						Total Qty	792.00	101.00	79992.00
89	Providing PVC ringtite pipes conforming to IS 985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. complete For: PVC pipes 63mm dia., 6 kg/sqcm & class 3 (BWSSB SR 2023-24, Page No.113 Item No.10.1.4)								
		Mtrs							
			1	200.00			200.00		
						Total Qty	200.00	161.00	32200.00
90	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, consolidating and depositing layer by ramming after watering with a lead upto 50 m, and lift upto 1.5 m. Including cost of all labour complete as per specifications (KPWD SR 2023-24, V-1, Page No.7 Item No.1.10)								
	Rate Analysis	Cum							
	Basic Rate Rs.	484.00							
	Area weightage 10%	48.40							
	Total Amount Rs.	532.40							
	80% of excavated earth, vide qty from item no.	87					285.12	160.00	45619.20
								Total Construction Cost	6779485.6
								Add GST Charges 18%	1220307.4
								BESCOM Charges 4*20000	80000.0
								Sub Total-2	7999793.4
								Misc and rounding off	206.96
								Grand Total Amount	8000000

Technical Sanction Accorded For ... 80.00Lks Head of A/C ... P-3726 CER NO : 67 ... Dt: 2/12/24 TA

Administrative Sanction for Rs. 80.00 Lakhs Revised Estimate (Work Only) is accorded under Head P-3726 Registered as CE No ... Subject to conditions contained in enclosed memo No. SSHRTEE/YNHD/AS/19/23-24 Dt. 2/12/24 Executive Engineer

Certificate:

1. The work spot has been inspected and found to be necessary
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of 2023-24 (KPWD, ELE, BWSSB)

Assistant Engineer
Ward No.03

Assistant Executive Engineer
Yelahanka Satellite Town Sub Division
BBMP, Bangalore

Executive Engineer
Yelahanka Division
BBMP, Bangalore